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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/195,332	11/18/1998	VIBHU K. KALYAN	020431.0328	4204

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DALLAS, TX 752012980

EXAMINER
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NGUYEN, NGA B

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.  
**09/195,332**

Applicant(s)  
**Kalyan**

Examiner  
**Nga B. Nguyen**

Art Unit  
**3628**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Jan 7, 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15) ☒ Notice of References Cited (PTO-892)                      18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_                      20) ☐ Other:

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### **DETAILED ACTION**

1. This Office Action is in response to the Amendment filed on January 7, 2002, which paper has been placed of record in the file.
2. Claims 1-19 are pending in this application.

#### ***Response to Arguments/Amendment***

3. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new grounds of rejection.

#### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-15 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter, particularly, an abstract idea.

The claims, as presently claimed and best understood were reconsidered in light of the "Examination Guidelines for Computer-Related Inventions" and were found to be non-statutory. Discussion of the analysis of the claims under the guidelines follows.

The claimed invention merely manipulate an abstract idea that is not within the technological arts. Mere recitation in the preamble or mere suggestion in the claim that a

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machine is performing some or all of the steps in the method is not enough to place claimed invention in the technological arts. The body of the claims must unambiguously recite that a machine/apparatus is performing the steps and/or is integrally involved in the process (claims 1-15 recite "a computer-implemented method" in the preamble).

The claimed invention is also noted not to be a computer program, data structure, a natural phenomenon, and a non-descriptive material per se. The claimed invention also is not a product for performing a process, not it is a specific machine or manufacture. The claimed invention is not a specific tangible machine for facilitating a business transaction. Claims 1-15 do not appear to correspond to a specific machine or manufacture disclosed within the instant specification and thus encompassed any product of the class configured in any manner to perform the underlying process. The claimed invention of claims 1-15 also does not include a post-computer process activity or a pre-computer process activity. Thus, no physical transformation is performed, no practical application in the technological art is found. Consequently, claims 1-15 are analyzed based upon the underlying process, and are thus rejected as being directed to a non-statutory process. Therefore, the claims are non-statutory, because they are directed solely to an abstract idea without practical application in the technological arts.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Maeda et al (hereinafter Maeda), U.S. Patent No. 5,377,095.

Regarding to claim 1, Maeda discloses a computer-implemented method of valuing products, comprising:

assigning a price to each of a plurality of products, each product comprising one or more product components (column 3, lines 54-57);

assigning a demand probability value to each product (column 4, lines 20-21);

calculating a component value for each component by performing the following steps: (a) assigning a beginning value for each component; (b) for a first component, calculating prorated values, such that for each product using that component, a prorated value is calculated on that component by calculating the difference between the product price and a value of the product's other components; (c ) calculating a component value as a function of the prorated values and the probability values; (d) repeating steps (b) and (c ) for other components; (e) determining whether the component values converge; and (f) if any component value does not converge, using the calculated component value as the beginning component value and repeating steps (b) through (e) for that component (figures 29-32 and column 11, line 65-column 12, line 55); and

calculating a value for each product, based on the results of the preceding step, by summing the component values of all components of that product (column 13, lines 48-67).

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Regarding to claim 2, Maeda discloses step (c ) is performed by multiplying probability values by prorated values (column 12, lines 35-40).

Regarding to claim 3, Maeda discloses step (c ) is performed by obtaining a sum of products of probability values and prorated values (column 13, lines 63-65).

Regarding to claim 4, Maeda discloses the probability values include both the probability of demand for a product and the probability that demand will arrive in a certain order relative to other products (column 7, lines 14-23).

Regarding to claim 5, Maeda discloses the method is performed to value non-standard products and assigning prices to products is performed by assigning prices of standard products (figures 9, 10).

Regarding to claim 6, Maeda discloses a computer-implemented method of pricing an order for product based on varying lead times during a specified time period, comprising;

calculating a set of values for a product over a range of available supplies of the product; determining a size Q of the order; selecting a set of order points during a time horizon, each order point having a least time LT to the next order point; for a first order point, calculating an incremental production quantity  $a$  as  $Q/LT$ , and calculating revenue displaced by the incremental production quantity using the product values; repeating the preceding step for each other order point; calculating an average displaced revenue; and calculating the price for the order, using the results of the preceding step (figure 34 and column 13, line 48-column 14, line 22).

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Regarding to claim 7, Maeda discloses the product has multiple components and the method further comprises repeating all steps for each component and summing the results (figures 28, 34).

Claim 8 contains similar limitations found in claim 1 above, therefore, is rejected by the same rationale.

Regarding to claim 9, Maeda discloses the displaced revenue is calculated by integrating a curve representing the set of product values (figure 9).

Regarding to claim 10, Maeda discloses the displaced revenue is calculated as the difference between a total potential revenue, determined from the product values for all available supplies S, and the total potential revenue for S-Q (column 11, line 65-column 12, line 55).

Regarding to claim 11, Maeda discloses a computer-implemented method of pricing made-to-order products, comprising:

assigning a demand probability value to each of a plurality of products, each product having an associated delivery time and price (column 5, lines 9-17);

calculating an expected revenue from the products for at least two available capacities, the expected revenue being a function of the demand probability value and the prices (figure 30 and column 12, lines 20-50);

calculating an asking price for each of the products as the different between its expected revenue from successive available capacities (figure 30 and column 12, lines 20-50).

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Regarding to claim 12, Maeda discloses the expected revenue is calculated as a sum of products of the probability values and the prices (figure 9).

Regarding to claim 13, Maeda discloses the expected revenue is calculated from a binary tree representing the probability values and the prices (figure 9).

Regarding to claim 14, Maeda discloses the expected revenue is calculated for each product in response to a product control policy (column 16, lines 37-65).

Regarding to claim 15, Maeda discloses comparing the asking price for different products at a given capacity (figure 40).

Claims 16-19 have similar limitations found in claims 1, 6, 11 above, therefore, are rejected by the same rationale.

### ***Conclusion***

8. Claims **1-19** are rejected.
9. The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure (see Form PTO-892 for the list of prior arts).
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nga B. Nguyen, whose telephone number is (703)306-2901. The examiner can normally be reached on Monday-Thursday from 8:30 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough, can be reached on (703)308-0505.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-1113.

**11. Any response to this action should be mail to:**

Commissioner of Patents and Trademarks

c/o Technology Center 3600

Washington, D.C. 20231

**or faxed to:**

(703) 305-7687, (for formal communications intended for entry)

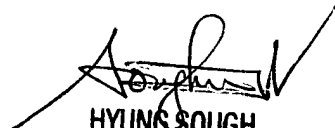
**or:**

(703) 308-3961 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive,  
Arlington, VA, Seventh Floor (Receptionist).

Nga B. Nguyen  
March 27, 2003

  
HYUNG SOUH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600